



# CASE REPORTS

## Grand Mal Seizures Following Ingestion of LSD<sup>25</sup>

DUKE D. FISHER, M.D., AND J. THOMAS  
UNGERLEIDER, M.D., *Los Angeles*

VARIOUS UNTOWARD REACTIONS to lysergic acid diethylamide tartrate (LSD<sup>25</sup>) have been recorded in the psychiatric literature.<sup>4,8</sup> The authors<sup>7</sup> have themselves observed chronic psychiatric complications in patients following ingestion of the drug. In the case here reported the patient had no adverse psychiatric side effects from LSD but had two grand mal seizures after using the drug. So far as we could determine, there have been no previous reports in the literature of clinical seizures following LSD ingestion, although there have been several general allusions to the subject.<sup>1,2,3,5,6</sup>

### Report of a Case

The patient was a 32-year-old Caucasian man, a graduate student in anthropology who worked as a night watchman for a film studio. He had ingested LSD for the first time approximately five months before he entered the UCLA Neurology Clinic for investigation of grand mal seizures. He said he believed he had taken 450 mcg on that first occasion, but since the LSD was illicitly obtained he could not be sure of the dosage. Approximately 30 minutes after ingesting the drug, the patient noticed hallucinations of color, feelings of unreality

and preoccupation with detail. Approximately 50 minutes after ingestion, he had a grand mal seizure which included tonic and clonic movements, unconsciousness and urinary incontinence, all observed by the patient's LSD "sitter," a clinical psychologist. The patient recalled being confused and disoriented for approximately two hours after the seizure. The remainder of the LSD experience persisted for approximately 12 hours without further seizure activity. Afterward the patient noticed pain in the back, and x-ray films taken later in the emergency room of UCLA Center showed fractures of the fifth and seventh thoracic vertebrae.

The patient had four subsequent LSD sessions, using an undetermined amount of LSD, with no seizures. Approximately two months before he was observed in the Neurology Clinic, he took LSD for the sixth time and had another grand mal seizure in the presence of two friends. Concerned that he might have seizures without using LSD, he referred himself to the UCLA Neurology Clinic.

There was no history of previous seizure activity or of birth trauma, recent infectious disease or head injury. Nor was there family history of seizures. Except for the intermittent use of marijuana, the patient said he had not used drugs other than LSD.

Results of general physical and neurological examinations were entirely within normal limits. On examination of mental status the patient was noted to be quite anxious, without evidence of any psychotic material. There was no persistent LSD psychosis, severe depression, recurring hallucinations or delusions. The patient had identified with the "acid head culture" and was quite preoccupied with LSD, which he described as his religion.

An electroencephalogram was within normal limits. Lumbar puncture was performed; opening pressure was 160 mm of water and the fluid was clear and colorless. Closing pressure was 130 mm.

From the Department of Psychiatry, UCLA Center for the Health Sciences.

Submitted 14 December 1966.

Reprint requests to: Department of Psychiatry, UCLA Center for the Health Sciences, 760 Westwood Plaza, Los Angeles 90024 (Dr. Fisher).

Colloidal gold, protein, sugar and cells were all found to be within normal limits. Blood creatinine and fasting blood sugar were normal, as were complete hemogram and urinalysis.

Diphenylhydantoin sodium (Dilantin®), 100 mg three times a day was prescribed and in a one month follow-up there were no seizures. The patient then stopped taking Dilantin and at last report no further seizures had occurred. However, it should be noted that the patient had not taken LSD since the occurrence of the seizure, several months before, that had caused him to seek medical consultation.

## Discussion

Although this appears to be the first reported case of grand mal seizures associated with ingestion of LSD, it should be noted that many persons with complications of LSD are not seen by physicians or do not go to hospitals.<sup>4</sup> The mechanism by which LSD produced the seizure activity is not known. The drug may have reduced the seizure threshold.

With the continued widespread use of LSD, physicians should be alert to the possibility of yet another side effect from this very controversial drug.

## Summary

A man who had no past history of such occurrences, had two grand mal seizures after oral ingestion of LSD. Subsequent neurological and electroencephalographic evaluation showed no abnormalities. Dilantin was prescribed and when at the end of a month no further seizures had occurred, the patient stopped taking the drug. He had not taken LSD since he had the seizure that caused him to seek medical advice.

### GENERIC AND TRADE NAME OF DRUG

Diphenylhydantoin sodium—*Dilantin*.

### REFERENCES

1. Cohen, Sidney: Personal communication.
2. Cohen, Sidney, and Alpert, Richard: LSD, New American Library, New York, 1966, page 84.
3. Cohen, Sidney: A classification of LSD complications, *Psychosomatics*, VII:185, May to June 1966.
4. Frosch, W. A., Robbins, E. S., and Stern, M.: Un-toward reactions to LSD resulting in hospitalization, *New Engl. J. Med.*, 273:1235-1239, 2 December 1965.
5. Rosenfeld, Albert: The vital facts about the drug (LSD) and its effects, *Life*, 60:30-31, March 1966.
6. Rosenfeld, Albert: Personal communication.
7. Ungerleider, J. T., and Fisher, Duke D.: LSD: Research and joy ride, *The Nation*, 16 May 1966.
8. Ungerleider, J. T., Fisher, Duke D., and Fuller, M.: The dangers of LSD, *J.A.M.A.*, 197:389-392, 8 August 1966.

# Autoimmune Progesterone Urticaria

THEODORE A. TROMOVITCH, M.D., AND  
WILLIAM F. HEGGLI, M.D., *San Francisco*

URTICARIA CAN BE caused by a wide variety of factors. The following case report of autoimmune progesterone urticaria stresses that endogenous hormones should be considered in cases of chronic urticaria.

## Report of a Case

A 29-year-old white married woman, gravida 4 para 4, had recurrent dermatitis for eight years. The lesions were typical hive-like wheals 0.5 to 3.0 cm in diameter which occurred anywhere on the skin. They regularly appeared seven to 10 days before the menstrual period and spontaneously disappeared approximately the third day past the period. Between times the patient was completely free of dermatitis of any type. Except for this recurrent disease she was in excellent health.

The history did not elicit any relationship of the disease to drugs, and elimination of such common offenders as aspirin and vitamins brought about no remission, nor did elimination diets provide a clue.

A month before she was observed, the temporal pattern of urticaria changed: the lesions continued for a month instead of abating with the cessation of menses. Treatment with antihistamines had given partial relief for a time, but the severity of the eruption had also increased to the point that the use of oral steroids was necessary.

On physical examination the only abnormalities noted were florid bilateral and symmetrical urticarial lesions of the trunk and extremities.

Results of routine examination of blood and urine were within normal limits.

When the lesions were present in a relatively mild state, a single intramuscular injection of 20 mg of progesterone was given. Within an hour the hives already present became larger and new lesions developed over the entire cutaneous surface. The size and number of lesions increased for another hour and it became necessary to stop further progress of the urticaria.

From the Department of Medicine (Dermatology), University of California Medical Center, San Francisco.

Submitted 6 September 1966.

Reprint requests to: 909 Hyde Street, San Francisco 94109 (Dr. Tromovitch).